



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,165	02/26/2002	Walter F. Rausch	1604	7463
28004 SPRINT	7590 07/31/2007	•	EXAMINER	
6391 SPRINT PARKWAY			TRAN, TUAN A	
KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100		·	ART UNIT	PAPER NUMBER
O V DIADI II V D			2618	
				DEL WEDV MODE
			MAIL DATE	DELIVERY MODE
			07/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# MAILED

JUL 3 1 2007

Technology Center 2600

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/083,165 Filing Date: February 26, 2002 Appellant(s): RAUSCH ET AL.

Steven L. Webb For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 05/08/2006 appealing from the Office action mailed 02/24/2005.

Art Unit: 2618

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

a. Whether claims 1-7, 12-20 and 25-26 are anticipated under 35 U.S.C. 102(e) by U.S. Publication 2002/0068612 (Carey et al.).

#### **GROUNDS OF REJECTION NOT ON REVIEW**

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief.

Page 3

Application/Control Number: 10/083,165

Art Unit: 2618

b. Claims 8-11 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. (2002/0068612).

### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0068612

**CAREY** 

06-2002

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 1-7, 12-20 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al. (2002/0068612).

Regarding claims 1 and 7, Carey discloses a communication system (See fig. 1c) for providing communication services to a plurality of communication devices 20, the

Art Unit: 2618

communication system comprising: a transmitting antenna 180-380 wherein the transmitting antenna comprises an omni-directional antenna (See fig. 5 and page 10 [0093-0094]); a transmitter 32 connected to the transmitting antenna 180-380 and configured to transmit first wireless signals via the transmitting antenna 180-380 (See figs. 4-5 and page 8 [0080], page 9 [0097]); a first receiving antenna 180, 380 wherein a first coverage area 152, 352 of the first receiving antenna 180, 380 is less than 45 degrees, a first receiver 32 connected to the first receiving antenna 180, 380 and configured to receive second wireless signals via the first receiving antenna 180, 380 (See figs. 4-6 and page 8 [0079-0080], page 10 [0093-0094], [0097], [0102], page 11 [0103]); a second receiving antenna 280 wherein a second coverage area 252 of the second receiving antenna 280 is less than 45 degrees and within the first coverage area, a second receiver 32 connected to the second receiving antenna 280 and configured to receive third wireless signals via the second receiving antenna 280 (See figs. 4-6 and page 8[0079-0080], page 10 [0093-0094], [0097], [0102], page 11 [0103]); and a communication interface connected to the transmitter, the first receiver, the second receiver, and a communication network and configured to provide the communication services between the communication network and the user communication devices (See fig. 1c and page 4 [0047-0049).

Claims 14 and 20 are rejected for the same reasons as set forth in claims 1 and 17, as method.

Art Unit: 2618

Regarding claims 2-5, Carey discloses as cited in claim 1. Carey further discloses the first wireless signals, the second wireless signals, and the third wireless signals are in the MMDS or MDS frequency range (See fig. 1c and page 4 [0043-0045]).

Claims 15-18 are rejected for the same reasons as set forth in claims 2-5, as method.

Regarding claims 6 and 12-13, Carey discloses as cited in claim 1. Carey further discloses the user communication devices comprise wireless broadband routers 70 (See fig. 3 and page 7 [0070]) and the communication interface comprises a downstream and upstream managers 43, 44, 46 (See fig. 1c and page 4 [0047-0049], page 6 [0061-0063]).

Claims 19 and 25-26 are rejected for the same reasons as set forth in claims 6 and 12-13, as method.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 8-11 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. (2002/0068612).

Regarding claims 8-11, Carey discloses as cited in claim 1. However, Carey does not explicitly mention that the first coverage area is 36 or 24 degrees and the

Art Unit: 2618

second coverage area is 24 or 12 degrees. Sine Carey does suggest that the coverage areas can be adjusted (increasing or decreasing in degree) (See figs. 6, 9-10 and page 10 [0102], page 11 [0103], page 12 [0113], page 13 [0118-0121]); therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the first coverage area is 36 or 24 degrees and the second coverage area is 24 or 12 degrees for the advantage of minimizing the undesired signal level while maintaining a sufficiently uniform distribution of the desired signal level in each coverage area.

Claims 21-24 are rejected for the same reasons as set forth in claims 8-11, as method.

#### (10) Response to Argument

With respect to appellant's argument filed on 05/08/2006, the responses are follows:

The Appellant argued that Carey does not teach that a second coverage a. area of a second receiving antenna is within the first coverage area of a first receiving antenna as required by claim 1 (See Appeal Brief, Argument section, page 6). The Examiner respectfully disagrees with the Appellant's argument because of the following reason:

As disclosed in the Specification, figure 10 and page 31 line 29 to page 32 line 7, the first coverage area of the first receiving antenna 1038 is the thirty six degree angular area excluded the center ten degree angular area where the first receiver 1034 receives transmitted wireless signals in the MDS1 frequency range via the first receiving Application/Control Number: 10/083,165 Page 7

Art Unit: 2618

antenna 1038, and the second coverage area of the second receiving antenna 1040 is the center ten degree angular area where the second receiver 1036 receives transmitted wireless signals in the MDS2 frequency range via the second receiving antenna 1040 and "within" the first coverage area of the first receiving antenna. Similarly, the operation of the wireless communication system as disclosed by Carey, wherein a second coverage area 252 of the second receiving antenna 280 (where the receiver 32 receives the wireless signals, transmitted by the subscriber communication devices in the area 252, in a frequency range via the second receiving antenna 280) is less than 45 degrees and "within" the first coverage area 152, 352 of a first receiving antenna 180, 380 (where the receiver 32 receives the wireless signals, transmitted by the subscriber communication devices in the area 152, 352 and not in the area 252, in a different frequency range via the first receiving antenna 180, 380) (See figs. 4-5 and page 8 [0079-0080]).

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Tuan Tran

Art Unit: 2618

July 18, 2007

Conferees:

Matthew D. Anderson - Supervisor Patent Examiner

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

William Trost - Supervisor Patent Examiner

ATTN:

HARLEY R. BALL

**6391 SPRINT PARKWAY** 

MAILSTOP: KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100